Congress of the United States
Washington, DC 20515

March 15, 2018

The Honorable Kay Granger
Chairwoman
Subcommittee on Defense
Committee on Appropriations
U.S. House of Representatives
Washington, DC 20515

The Honorable Pete Visclosky
Ranking Member
Subcommittee on Defense
Committee on Appropriations
U.S. House of Representatives
Washington, DC 20515

Dear Chairwoman Granger and Ranking Member Visclosky:

As you prepare the Defense Appropriations Act for Fiscal Year 2019, I respectfully request increased funding at the level of $3 million, in Army RDT&E - PE 0602784A/Military Engineering Technology.

The U.S. Army has invested hundreds of millions of dollars to develop, test, and deploy technology designed to operate and sustain forces in any global environment. With strategic interests adjusting to include near-peer and European contexts, needs and gaps of military operations, and sustainment in cold complex environments have reemerged. This programmatic request includes science support to advance the knowledge of snow and its impacts needed to enhance both the development and test operations of maneuver platform technology, sensors and targeting systems. Domestically, the DOD's U.S. Army Corps of Engineers requires accurate, timely snow estimates for water resource allocation, design and construction, and flood forecasting. Internationally, recent history has caused the Army to revisit cold complex environments' impacts on DOD operations. The future deployment of autonomous vehicles is particularly difficult in cold regions due to hazardous road conditions, limited visibility, and degraded sensor performance in cold and snow conditions.

For New Hampshire and the Northeast region, snowmelt floods and ice jams impact communities, stress emergency management services, and challenge sustainable water resources management. Winter creates distinct seasonal economies for the northern tier including the snowsport industry, fall foliage tourism, and the maple sugar industry. Snow also impacts the ability of transportation systems to safely and efficiently provide movement and mobility of goods, services, and people. The future deployment of autonomous vehicles is particularly difficult in cold regions due to hazardous road conditions, limited visibility, and degraded sensor performance in cold and snow conditions. Mitigating these hazards improves the state's ability to plan, design, and manage its infrastructure and ecosystems as well as to support statewide economic activity.

This programmatic request would support strategic investments in recent advances in unmanned aerial systems (UAS) sensors, sensing platforms, and data analytics as well as faculty training and undergraduate and graduate research. ERDC-CRREL should also include science-support for knowledge of snow and its impacts into its programs to enhance both the development and test operations of maneuver platform technology, sensors and targeting systems.

I also request that the following report language be included:

Cold Weather Military Research—The committee has included $3 million for the Cold Regions Research and Engineering Laboratory to begin new work to develop an analysis methodology for snow and environment conditions to help incorporate science support into the future development and test current and emerging concepts of vehicle platforms and sensing systems. Increasing the availability of snow data drives this need and will help reduce development and testing costs at the outset by enhancing the design process to account for key environmental parameters most likely to either enhance or decrease system performance.

Thank you for your consideration of this request for increased funding at the level of $3 million, in Army RDT&E, PE 0602784A, Military Engineering Technology and related report language. Advances in snow characterization benefit the Northeast region, as well as the nation with respect to hazard mitigation, transportation, and national security.

Sincerely,

Carol Shea-Porter

Carol Shea-Porter
Member of Congress